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ADVISORY DEPARTMENT
OF THE IMPERIAL COLLEGE OF
TROPICAL AGRICULTURE

IMPERIAL MYCOLOGICAL
30 JUNE 1936
INSTITUTE

REPORT

OF THE

AGRICULTURAL DEPARTMENT

DOMINICA

1935.

ISSUED BY THE IMPERIAL COLLEGE OF TROPICAL AGRICULTURE

1936.

[Price Sixpence.]

PRINTED AT THE BULLETIN OFFICE, ROSEAU, DOMINICA, B. W. I.

With the compliments of

The Curator & Agricultural Superintendent.

Dominica,
B.W.I.

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OF THE IMPERIAL COLLEGE OF
TROPICAL AGRICULTURE

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LETTER OF TRANSMITTAL.

C.A. 446/36.

24TH APRIL, 1936.

SIR,

I have the honour to submit the Report of the Agricultural Department of Dominica for the year 1935.

2. Weather conditions during the year were in no marked way abnormal and can be considered as having been on the whole favourable.

3. The total exports and export values of the agricultural industries in 1935 were little different from those of 1934, but it is gratifying to record that the slight difference was an increase and that the general condition of the industries at the end of 1935 indicates further increased production within the next few years.

4. The lime industry has reached the stage when considerable areas of young budded trees planted since the destruction of the seedling lime trees by hurricanes and disease are beginning to come into bearing and increased exports of lime products may be anticipated in the immediate future.

5. Exports of bananas in 1935 were nearly double those of the previous year. The banana industry, more than any other, gives promise of rapid expansion during the next few years. It is of vital importance, however, for the permanence of the industry that adequate attention be paid in these initial years to the control of Panama disease and to the training of the peasant cultivator in the methods of producing bananas of the standard desired for export.

6. Exports of oranges and grapefruit were also greater than in the previous year, and the demand shown for Dominica oranges in Canada during last summer may be taken as indicating that orange exports will continue to rise. No large increase in exports of grapefruit need be expected until the seedless varieties begin bearing two or three years hence.

7. Of other crops, coconuts is the most important. An additional market was investigated during the year for dry coconuts and the prospects of developing the regular export of dry nuts to this market are considered favourable.

8. Work in the Experiment Station has been carried on satisfactorily and useful information will be derived therefrom in due course.

9. The Botanic Gardens were maintained in an attractive condition and certain improvements of a permanent nature were completed.

10. Owing to a reduction in the funds available for nursery work, the work in the nurseries for the propagation of economic plants was reorganized and all country nurseries were closed. It will be necessary to make provision on the local estimates for the continuation of this important work.

11. A reduction in staff has been found necessary, thus placing additional responsibility on those remaining. It is unfortunate that the need for reduction coincides with a period of considerable activity in the development of the banana industry. The Agricultural Superintendent and his assistants are endeavouring to carry out a heavy programme of work under conditions of great difficulty.

I have the honour to be,
Sir,
Your obedient servant,

G. A. JONES,
Commissioner of Agriculture.

His Honour,
The Administrator,
DOMINICA, B. W. I.

AGRICULTURAL DEPARTMENT,
DOMINICA, B. W. I.
8TH APRIL, 1936.

No. 104.

SIR,

I have the honour to submit the Annual Report of the Agricultural Department, Dominica, for the year ended 31st December, 1935.

I have the honour to be,

Sir,

Your obedient servant,

F. G. HARCOURT,
Agricultural Superintendent.

The Commissioner of Agriculture,
Advisory Department,
Imperial College of Tropical Agriculture,
TRINIDAD, B. W. I.

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STAFF OF THE

AGRICULTURAL DEPARTMENT, DOMINICA.

F. G. HARCOURT, M.B.E., F.R.H.S.	Agricultural Superintendent and Curator, Botanic Gardens.
H. B. PIDDUCK, N.D.A., N.D.D., (HONS.)	Assistant Agricultural Officer.
W. E. BASSETT	Assistant Agricultural Officer.
A. C. WINSTON	Travelling Agricultural Instructor.
L. A. ROBERTS	Clerk.
C. M. ALEXANDER	Foreman.

GOVERNMENT FRUIT FARM, COPT HALL.

S. A. SCHOUTEN, Dip. Agric. (I.C.T.A.)	Assistant Agricultural Officer.
G. J. STEDMAN	Foreman.

GOVERNMENT MARKETING DEPOT.

E. E. TAYLOR	Officer-in-Charge and Chief Fruit Inspector.
G. A. WINSTON	Clerk.
J. J. MCDOWELL	Foreman and Fruit Inspector.

ANNUAL REPORT OF THE AGRICULTURAL DEPARTMENT, DOMINICA.

FOR THE YEAR ENDED 31st DECEMBER, 1935.

SECTION I.

AGRICULTURE IN THE PRESIDENCY.

1. WEATHER CONDITIONS.

THE past year was on the whole a favourable one as far as climatic conditions were concerned. Light drizzles of rain during the flowering period of lime trees, however, increased the incidence of withertip disease which was responsible for a reduction in crop. Several spells of dry weather held up planting operations and also retarded the progress of plantings made during the early part of the wet season.

The rainfall at the Botanic Gardens for 1935 amounted to 71.95 inches. This was 3.47 inches less than the average annual precipitation for the last twenty years.

The usual tabular summaries of meteorological observations are given at the end of this report and the thanks of the department are extended to those planters who kindly co-operated and forwarded rainfall returns from the various parts of the island.

2. AGRICULTURAL INDUSTRIES.

Limes.—In the aggregate, production of limes and lime products during 1935 was greater than in the previous year and the exports, calculated as barrels of fruit, showed an increase of over 1,000 barrels. The export figures, expressed in barrels of fruit totalled 28,213 in 1935 as compared with 27,093 in 1934. As a further indication that production of limes is on the increase, there was a fairly large carry-over of products at the end of the year whereas the carry-over of the previous year was negligible. Young budded lime trees planted since the destruction of the seedling lime by hurricane or disease have commenced to bear fairly good crops and there is now every prospect of the production gradually increasing. Withertip disease was responsible for a considerably reduced crop, particularly in the Northern District, but grubs attacking the roots of young trees were not so much in evidence.

The local Treasury returns of lime products exported during 1935 were as follows :—

Products.	Quantity.	Estimated F. O. B. Value. £
Essential Oil (Distilled) .	7,127 lbs.	7,443
do. do. (Ecuelled) .	140 ,,	186
Oils in solution in Raw Juice exported ..	567 ,,	589
Green Limes	4,035 brls.	6,123
*Raw Lime Juice ..	48,074 gals.	2,002
Concentrated Lime Juice	3,372 ,,	184
Lime Juice Cordial ..	101 ,,	8
Pickled Limes	207 brls.	474
		£17,009

* Includes all juice other than concentrated.

The market for green limes was not all that could be desired, but a well-distributed demand led to an increased quantity being sold and at prices satisfactory to the shipper. The price of distilled lime oil remained at a remunerative level and a greater quantity was exported. Co-operation with other producing centres, following recommendations agreed upon at a meeting of the West Indian Fruit & Vegetable Council (Eastern Group) held in St. Lucia, was to a large extent responsible for firming the market for distilled oil and green limes. The demand for raw lime juice was spasmodic and on occasions, owing to lateness of crop, stocks available locally were insufficient to meet demands. Prices on the whole were satisfactory.

New processes discovered and developed for the manufacture of citric acid from products other than citrus are responsible for the collapse of the market for concentrated lime juice, for many years the principal product of the industry. A small quantity, however, is still being shipped, but there is practically no demand and prices are very low. During the year little difficulty in disposing of the lime crop in the form of oils, green limes or raw juice was experienced.

The following table shows the quantities of each product calculated as barrels of fruit, actually exported in 1935.

Products.	Barrels of fruit.	Approximate percentage of total crop.
Distilled Lime Oil ..	20,961	74. 31
Ecuelled Lime Oil ..	1,120	3. 98
"Oils in Solution" ..	1,890	6. 66
Green Limes	4,035	14. 31
Pickled Limes	207	. 74
	Total .. 28,213	

The conversion table is as follows:—

Ecuelled Oils (lbs.) multiplied by 8 equals Barrels of fruit ecuelled.

Total distilled oil (lbs.), minus total ecuelled oil (lbs.), multiplied by 3 equals Barrels of fruit unecuelled.

Oils (lbs.) in solution in raw lime juice multiplied by 3⅛ equals Barrels of fruit exported as raw juice.

For the purpose of comparison with former years, the following table gives the crop expressed in round numbers shipped annually since 1919. These figures do not necessarily represent yearly production, owing to the carry-over from year to year of certain products.

Years.	*Barrels.*	*Remarks.*
1919/22 (average) ..	422,000	
1923/26 (,,) ..	274,000	Decline in production
1927/30 (,,) ..	165,000	due to withertip disease,
1931 (actual) ..	68,000	hurricane damage and
1932 (,,) ..	48,000	root diseases.
1933 (,,) ..	36,000	
1934 (,,) ..	27,000	
1935 (,,) ..	28,000	

Bananas.—The banana industry is making satisfactory progress and is already proving to be one of considerable value. The crop exported during 1935 totalled 71,527 bunches, being 33,677 bunches more than that exported during the previous year. The presence of an assured market for all exportable fruit of the Gros Michel banana grown in Dominica has led to considerable activity in planting both by planters and peasants. The Dominica Banana Association has done and is doing particularly good work in organising the industry on sound and modern lines.

Panama disease (*Fusarium cubense*), although occurring in most districts, did not materially affect the yield from the chief producing areas, but is undoubtedly a limiting factor in many localities in the Southern District. The peasant grower, although familiar with its appearance, does not, however, fully appreciate its dangers.

Banana borer (*Cosmopolites sordidus*) is of fairly widespread occurrence. Control measures are not very generally employed, but growers are gradually becoming aware of the losses which may result from this neglect.

Oranges and Grapefruit.—The orange and grapefruit export trade is making satisfactory progress and exports during 1935 showed a marked increase.

Navel oranges were in big demand by Canadian buyers and have established a reputation of being in a class of their own on account of their good flavour and juiciness. Valencia oranges were also in good demand. The inter-colonial trade was well maintained. Total exports were 6,954 crates and 1,896 barrels as compared with 5,348 crates and 1,844 barrels for the previous year.

Exports of grapefruit increased, the principal market also being Canada. The fruit trade, however, is becoming more and more exacting in its grapefruit requirements and there are definite indications that seedless varieties will be in principal demand in the future. Exports for 1935 amounted to 5,386 crates, an increase of 2,219 crates over the exports of the previous year.

Damage caused by root grubs attacking the roots of citrus trees was less in evidence than in the previous year. On some estates, however, adult weevils were responsible for damaging the leaves of young trees.

Other Fruits.—The export trade in mangoes and avocado pears was fairly well maintained and prices proved remunerative. Exports were: Mangoes, 3,462 crates and avocado pears 3,726 crates.

The fruit trade is reviewed more fully in this report under the heading of Government Marketing Depot.

Coconuts.—The price of copra having improved, there was a definite upward trend in the production and export of copra and coconuts. A market for dry nuts is being explored and a trial shipment of over 56,000 nuts was made. As a result of this shipment there is every likelihood of a regular export trade in dry nuts developing. Exports were: Coconuts, 230,170; Copra, 278,793 lbs.

Cocoa.—The price of cocoa during the greater part of the year was very low and offered little inducement to growers to spend money on anything more than the bare maintenance of cultivations. Some improvement in prices occurred at the end of the year and the bulk of the 1935-36 crop has been sold in advance. Exports totalled 344,156 lbs.

Rum.—The efforts which had been made during the past few years to build up an inter-island trade in rum and which at one time promised to meet with considerable success met a decided set-back through the promotion of a similar industry in other parts of the Colony. The competition thus created led to a considerable decline in the quantity of rum exported and at the moment there would appear little prospect for the industry other than for the island trade. Exports were 10,179 gallons.

Bay Oil.—This industry, in common with other agricultural industries, was affected by the depressed state of markets, but exports improved and amounted to 16,474 lbs. as compared with 14,988 lbs. during the previous year. The exports of bay rum were slightly less than during the previous year, being 516 gallons as compared with 549 gallons.

Tobacco.—Interest in tobacco-growing and the preparation of tobacco products for local use and for export is being displayed by one large estate. In addition to pipe tobacco and cigars, cigarettes are now being made. Exports of tobacco products were valued at £495.

Vanilla.—Although the exports of vanilla during 1935 were less than those of the previous year, greater interest is being shown in this crop and production for 1935-36 promises to be greater than for several years past. Exports amounted to 609 lbs.

Coffee.—Coffee growing is chiefly a peasant industry and the production is mostly for local requirements.

New Industries.—Experiments are being conducted by one enterprising planter in the growing of *Derris spp.* and Cus-Cus grass for commercial trial.

3. TABLE OF EXPORTS FROM DOMINICA FOR THE TRIENNIAL PERIOD 1933 TO 1935.

	1933.		1934.		1935.	
	Quantity.	Local Value. £	Quantity.	F.O.B. Value. £	Quantity.	F.O.B. Value. £
Lime Products:						
Concentrated Juice ...	35,467 gals.	1,817	7,462 gals.	273	3,372 gals.	184
Raw Juice	37,770 ,,	1,889	74,908 ,,	4,523	48,074 ,,	2,002
Lime Juice Cordial ...	70 ,,	10	113 ,,	28	--	--
Distilled Oil	9,302 lbs.	10,288	6,288 lbs.	6,418	7,127 lbs.	7,443
Ecuelled Oil	320 ,,	353	245 ,,	393	140 ,,	186
Green Limes	5,130 brls.	4,780	3,790 brls.	4,598	4,035 brls.	6,123
Pickled Limes	10 ,,	16	94 ,,	117	207 ,,	474
Other Fruits and Allied Products:						
Oranges	9,383 crates	3,268	9,651 crates	4,324	10,746 crates	5,773
Orange Oil	1,470 lbs.	294	482 lbs.	98	1,131 lbs.	235
Grapefruit	5,981 crates	2,684	3,167 crates	1,403	5,386 crates	2,596
Grapefruit Juice ..	1,088 gals.	21	—	—	329 gals.	31
Bananas	22,304 bunches	889	37,850 bunches	3,253	71,527 bunches	5,780
Mangoes	6,872 crates	931	4,084 crates	1,225	3,462 crates	1,363
Avocado Pears... ...	2,946 ,,	567	4,344 ,,	838	3,726 ,,	744
Miscellaneous		58		81		224
Cocoa Products:						
Cocoa, Raw	358,112 lbs.	2,550	324,333 lbs.	2,983	344,156 lbs.	3,459
Cocoa, Prepared ...	312 ,,	5	2,086 ,,	26	1,032 ,,	15
Coconut Products:						
Copra	105,237 lbs.	882	247,508 lbs.	836	278,793 lbs.	1,066
Coconuts	109,357	223	103,639	249	230,170	452
Sugar Products:						
Rum	24,660 gals.	3,811	17,521 gals.	2,281	10,179 gals.	1,428
Bay Products:						
Bay Oil	21,774 lbs.	3,630	14,988 lbs.	2,206	16,474 lbs.	2,421
Bay Rum	76 gals.	57	549 gals.	104	516 gals.	92
Spices:						
Vanilla	21 lbs.	2	797 lbs.	109	609 lbs.	152
Nutmegs		2		6		6
Ginger		2		4		9
Various Products:						
Coffee	1,183 lbs.	61	1,553 lbs.	53	859 lbs.	22
Vegetables		102		115		35
Farine		83		30		14
Hides and Skins ...		5		7		1
Leather, Unmanufac/d		42		42		63
Turtle Shells		—		--		26
Baskets		14		5		11
Tobacco and Cigars ...	2,109 lbs.	210	13,252 lbs.	1,109	6,568 lbs.	495
Forest Products:						
Hardwood	65,193 ft.	405	108,466 ft.	965	95,407 ft.	537
Firewood	84 cords	27	95 cords	34	46 cords	10
Canoe Shells		55		32	7	7
Shingles		1		3		2
Charcoal		6		77		12
Locally made boats ...		109		235		456
Total Re-Exports ...		4,204		13,304		12,595
Value of Total Exports ...		£45,024		£43,677		£57,486

NOTE. Various sized packages are used in the export of fruit and exports given above are converted to the most common pack.

SECTION II.

WORK OF THE DEPARTMENT.

I. THE BOTANIC GARDENS.

Decorative Section.—The Gardens were maintained in good order throughout the year and as usual attracted a large number of visitors. Special efforts were made to have them at their best for public functions in honour of the King's Silver Jubilee. In addition to ordinary routine work which consists principally of the care of lawns, trees, shrubs and hedges, a number of improvements were made.

The main drive was macadamised and oiled throughout its entire length under the supervision of the Public Works Department. This improvement adds considerably to the amenities of the Gardens and the drive should now prove more economical in upkeep.

The cricket pitch situated on the main lawn was specially prepared for the Leeward Islands cricket tournament and sections of other lawns were renovated.

Owing to the gradual deterioration in the condition of a number of botanical specimens through old age and other causes, young plants of over fifty species, including new introductions, were planted out in suitable situations and unsightly specimens removed A collection of hibiscus spp. and vars. and miscellaneous palms were also planted near the pot nursery for decorative purposes.

Economic Section.—The remodelling of this section of the Gardens was continued, but this work is of necessity slow as no special funds are provided for the purpose. Most of the fairly level land having been remodelled and vacant plots replanted, attention was given to hillside lands which contain principally old cacao trees irregularly interplanted with other plants of a miscellaneous nature. These plantings had become patchy and unsightly owing to the damage they received from hurricanes.

Hillside plot numbered H. S. 1 was cleared and replanted in seedling cacao of varieties specially selected for trial by Officers of the Cacao Research Scheme, Trinidad. Contour drains, with a slight fall, were constructed at distances averaging 30 feet apart. *Gliricidia sepium* and other legumes were planted as a temporary shade or cover ; also lemon grass along the edges of the contour drains for purposes of mulch and the prevention of soil erosion. Above and to the south of the plot, a representative collection of grafted mangoes was planted to give wind protection and interplanted with lemon grass for mulch.

Another hillside plot, planted in Pimento and numbered H. S. 2, was cleared, supplied and extended.

The demonstration plots on the level ground were maintained in good order and condition. The collection of citrus trees in plots 1 B, C and D, the planting of which was started in 1933, continued to make satisfactory progress and the more advanced trees have commenced to fruit. These plots are intended to demonstrate what may be accomplished by cultural methods and the use of vegetable mulches, without application of artificial fertilizers, for young trees in their early stages of growth. The orange varieties Lue Gim Gong and Temple were added to the collection.

The budded trees of avocado pear varieties planted in plot 1 A in 1932 again made parcularly good growth and most of the varieties carried a small crop of fruit. Butler and Simmonds promise to be earlier and Dunedin and Collinson later than the local varieties.

Plot 2 B, formerly under ornamental trees and shrubs, was planted in lime varieties budded on rough lemon stock. Later in the year the same varieties on sour orange stock were planted in plot 17 after the removal of old coffee trees.

The specially selected varieties of cacao raised from seed received from Trinidad and planted last year in plots 3 and 13 made rapid growth and a few unplanted pickets were completed. Seedlings from these selections were also distributed to two estates.

Forastero × *pentagona* cacao hybrids, the grafted progeny of old trees removed from plot 13, were utilised for filling an empty space in plot 21—Miscellaneous.

The usual routine work was carried out throughout the section. Legumes, described in last year's report, were extensively used as cover crops and bananas as a catch-crop between young cacao. *Tephrosia Vogelii* was introduced and planted as a cover crop in plot 2 A containing young citrus.

Costings were kept for each plot in order to facilitate economical working, to show the cost of performing various cultural methods and later, to provide statistical information as to the cost of bringing crops into bearing.

Nursery.—A small nursery is maintained for the propagation of decorative plants and plants of general or scientific interest, chiefly for meeting the needs of the Botanic Gardens. Surplus plants are at times available for sale or exchange. Distribution of such plants were :—

Palms	67
Miscellaneous decorative plants	98
Cuttings of decorative plants	42
Economic plants of no commercial value locally.	40
Packets of seeds of miscellaneous plants ..	85

Revenue derived from the sale of plants, seeds and cuttings amounted to £5. 5. 0½.

Plant and Seed Exchange.—Contributors of planting material included the Agricultural Departments of Antigua and St. Lucia ; the Imperial College of Tropical Agriculture, Trinidad ; J. G. Macintyre, Esq., A. S. Burleigh, Esq., Hampstead Estate, Dominica ; R. H. Montgomery, Esq., Florida ; F. G. Walsingham, Esq., Cuba. Satisfactory results were in most cases obtained in the propagation of plants from material kindly supplied by the above, which were almost entirely of an economic nature.

Recipients of planting material prepared and supplied by the department included His Honour the Administrator, A. S. Burleigh, Esq. and W. F. Harrison, Esq., of Dominica ; the Agricultural Departments of British Guiana and Montserrat ; the Royal Botanic Gardens, Kew ; B. Y. Morrison, Esq., Washington ; Mrs. O'Sullivan, Antigua ; R. C. Pickering, Esq., Missouri ; F. G. Walsingham, Esq., Cuba ; N. I. Sharapof, Esq., Russia ; W. A. Knight, Esq., Grenada. The material supplied to the above was mainly of an economic nature, but included seeds and cuttings of ornamental species.

Repairs to Buildings, etc.—Major repairs to the cocoa drier were carried out during the year both to the furnace and the drying compartments.

Nearly all the garden fixtures were repaired and where necessary, painted. They included the stable, pavilion, ladies' cloak-room, concrete steps and the drinking fountain.

Funds permitted of only the minimum attention to gates, boundary walls, sundry buildings and barbed wire fences throughout the department, many of which are in urgent need of renewal or extensive repairs.

2. PLANT DISTRIBUTION.

The nurseries at headquarters for the propagation of economic plants were maintained on a large scale, but their area was gradually reduced in order to allow of funds available for plant propagation being spread over two years instead of one.

All the country nurseries were closed : operations ceasing at Hampstead in February, at Soufrière in September and at Marigot in November. Surplus plants in these nurseries were either sold at reduced prices or given to approved peasants for planting in their holdings.

Sour Orange stocks were raised in the nurseries at headquarters in order to supply estate nurseries in country districts with selected stocks.

The propagation of budded lime trees was principally to meet requirements for the purpose of replacements and the completion of planting operations already begun. The demand for lime plants during the latter part of the year exceeded the numbers which could be supplied.

Orders for Navel and Valencia orange plants were well maintained and were mostly filled. The demand for other varieties was readily met and a small surplus carried over for future distribution.

The large stocks of grapefruit trees in hand at the end of 1934 were only partly cleared. There was a definite falling-off in the demand for this class of plant.

Long spells of dry weather necessitated fairly heavy expenditure on watering and irrigation work and naturally influenced the demand for plants. Special attention was again paid to the production of well-trained fruit trees and plants distributed were healthy and of good size.

Other economic plants were not propagated in so large a number as formerly as these plants are no longer distributed free and in consequence the demand has fallen off.

Expenditure on nursery work and plant distribution in 1935 amounted to £588. 10. 9 and receipts for plants sold to £326. 7. 2½.

The following tables show the variety and numbers of plants distributed during the year and since the commencement of the Plant Distribution Scheme in 1927.

Budded or Grafted Fruit Trees.

Name of Plant.	*Total for 6 years 1927–32.*	*Total for 1933.*	*Total for 1934.*	*Total for 1935.*	*Total for 9 years 1927–35.*
Washington Navel Orange	7,205	1,524	2,505	1,103	12,337
*Oranges (Other)	586	1,443	2,110	2,391	6,530
†Grapefruit	16,516	8,781	4,291	4,334	33,922
Portugal Orange	190	7	36	21	254
Mandarin	203	69	44	16	332
Sweet Lime	176	23	18	23	240
Tangerine	190	169	42	26	427
West Indian Limes	89,543	23,643	9,556	9,194	131,936
Limes (Other varieties)	5,359	—	248	269	5,876
Lemons	4,038	16	35	—	4,089
Avocado Pears	126	70	143	120	459
Mangoes	1,301	92	108	140	1,641
	125,433	35.837	19,136	17,637	198,043

*Principally "Valencia."
† Chiefly "Marsh."

Other Economic Plants.

Name of Plant.	*Total for 6 years 1927–32.*	*Total for 1933.*	*Total for 1934.*	*Total for 1935.*	*Total for 9 years 1927–35.*
Seedling Limes	41,720	—	—	—	41,720
Sour Orange	29,536	—	1,162	824	31,522
Coconuts	33,004	—	—	—	33,004
Cocoa	45,833	1,658	1,093	204	48,788
Coffee	123,217	3,140	3,272	1,447	131,076
Seedling Mangoes	256	—	—	—	256
Nutmeg	12,017	190	262	125	12,594
Tobacco	6,382	—	—	—	6,382
Mongosteen	360	—	—	26	386
Seedling Avocado Pears	295	20	6	—	321
Papaw	2,388	36	5	—	2,429
Tannias	31,600	70	—	—	31,670
Camphor	363	—	—	—	363
Black Pepper	680	152	205	30	1,067
Onions	54,637	—	—	—	54,637
Bananas	—	—	4,896	612	5,508
Sugar Cane Cuttings	26,643	—	—	—	26,643
‡Miscellaneous	58,964	5,966	10,484	1,679	77,093
	467,895	11,232	21,385	4,947	505,459

‡Includes cuttings and plants for cover crop and mulch purposes.

3. EXPERIMENT STATION.

In this station the plots of permanent crops, principally limes, are mainly laid out for demonstration purposes, and the young budded lime trees planted in 1929 and subsequently to demonstrate the value of good cultural methods, have made satisfactory growth and given a marked increase in yield. To facilitate economical working and later, it is hoped, to provide statistical information as to the costs of lime production, detailed costings were kept of each individual plot. Records were also kept of yields and manurial treatments.

Trials of Stocks for Limes.—Three plots—Nos. 1, 2 and 3—are each divided into three sections to provide a triplicate series of root trials for limes. They are contour-drained, cover-cropped with leguminous plants, mulched with lemon grass and the trees receive applications of fish manure and sulphate of ammonia in gradually increasing quantities as they develop.

The stocks used are sour orange, grapefruit and rough lemon. The trees were planted in 1930 and number 77 in each group of the three stocks, covering an area of approximately eight-tenths of an acre for each series and 2.414 acres in all. The yields recorded are as follows :—

Plots 1, 2 & 3. **Yields to the nearest Half-Barrel.**

	Rough Lemon 1A, 2A, 3A.	Grapefruit. 1B, 2B, 3B.	Sour Orange. 1C, 2C, 3C.	Totals.
1932	0½	1	1	2½
1933	6	10	6	22
1934	15½	18½	16	50
1935	48	53	47	148
Total, 4 years	70	82½	70	222½

Fully-grown Budded Lime Trees.—There are two plots, Nos. 4 and 5, on sour orange stock which are now twenty-two years old. In 1921-22 the combined mean yield of these plots approximated 241 barrels of fruit per acre, but a gradual reduction in yield followed the appearance of withertip disease in 1922 and was accentuated later by damage to the trees by the hurricanes of 1926, 1928 and 1930. The effect of this damage is still evident, but the trees have made fair recovery and yields are still profitable.

Plot 5 suffered most but has the advantage of a deeper soil and a gentle slope.

The calculated yields per acre for the past four years were as follows:—

Plot No.	*1932.*	*1933.*	*1934.*	*1935.*
4	113 brls.	79 brls.	121 brls.	155 brls.
5	182 ,,	86 ,,	123 ,,	200 ,,

Budded versus Grafted Limes.—Plot No. 6 is divided into two sections, one section being planted in grafted limes and the other in budded limes, sour orange being the stock used in both cases. The trees were planted in 1929 and so far the grafted trees have consistently given the higher yields. Yields in 1935 from the young grafted trees were at the rate of 114 barrels per acre and from the budded trees 59 barrels per acre.

Plots of Budded Limes.—Plots 7-11 contain limes on sour orange stock and were planted in 1930-31. They serve to demonstrate methods of cultivation as applied to lands of various gradients and trees planted at different distances apart. The plots were contour-drained where necessary and cover crops maintained. The trees are commencing to bear fairly good crops considering their age and many of them had to be relieved of their fruits for disposal as green limes. The actual yields for these plots were 43 barrels in 1934 and 226 barrels in 1935 from an area of 6.29 acres.

Top-working of Lime Trees.—It has previously been reported that the attempt to convert young limes budded on sour orange stock into Marsh grapefruit trees was not altogether successful. The trees successfully top-worked have, however, made fair growth and so far

there does not appear to be any marked form of incompatibility between the lime and the grapefruit. Lime trees on rough lemon stock have also been top-worked and results have been more satisfactory, probably due to better weather conditions and the experience gained in this particular work.

Grapefruit.—The crop from two small plots of grapefruit varieties planted in 1914–15 was either shipped to Canada or sold locally. The area reaped was .54 acres and the yield calculated to be equivalent to 476 crates per acre. The trees have suffered severely from the effects of three hurricanes and are subject to gummosis.

Nurseries.—A section of the Experiment Station was again used for citrus nursery work. The area for this purpose is being reduced and vacant land put under cover crops preparatory to their use for other purposes.

4. PESTS & DISEASES.

Root grubs (*Lachnosterna sp., Diaprepes sp. etc.*)—Damage done by these grubs attacking the roots of young citrus trees was less in evidence than in the previous year. The hand-picking of the beetles and the use of Vaporite as a soil fumigant have so far proved to be the most useful measures of control. A fair amount of defoliation was caused by the adult beetles at the Government Fruit Farm, but the grubs do not appear to be attacking the roots of the trees.

Scale Insects.—These pests, with or without the association of stinging ants, were fairly prevalent as usual, especially on citrus trees having inadequate wind protection. Spraying with an appropriate insecticide and grease-banding young trees have given satisfactory results.

Thrips.—This pest was not in evidence to any appreciable extent except on young plants of grafted mangoes in the department's nurseries. No difficulty was experienced in controlling this pest.

Panama Disease (*Fusarium cubense*).—A survey by Agricultural Officers has revealed that this disease is present in almost every cultivated area in the island. Every possible effort was made to impress upon growers the seriousness of this disease and most of the larger growers are taking the necessary precautions to guard against its spread. The peasantry do not fully appreciate its dangers although they are mostly familiar with its appearance. Officers of the department continued to give demonstrations in the control of Panama disease and in particular by the use of gas oil. Certain areas which were heavily infected were quarantined to prevent the distribution of diseased planting material. This latter measure, however, can be effective only with the earnest co-operation of the planting community.

Gummosis and Allied Diseases.—These diseases were not very prevalent. Occasionally the death of a young tree was attributed to this cause and in mild cases where the predisposing factor was low budding or planting, the health of the trees improved when the crown roots were semi-exposed.

Red Root Disease (*Sphærostilbe repens*).—This disease was identified as being present on the roots of three lime trees budded on rough lemon stock. This is the first definite case of this disease being found attacking the roots of the rough lemon in Dominica.

5. AGRICULTURAL INSTRUCTION.

Pupils.—The training of young men drawn largely from the country districts was modified somewhat owing to less funds being available for nursery work on which they are primarily employed. The number receiving training was reduced from eighteen to eleven. This reduction was made as gradually as possible in order to enable those leaving to find work on estates or make arrangements to return to their parents' holdings in the country. It was again found possible to retain the best pupils for special duties in the department.

A good deal of the semi-skilled labour in the various divisions of the department is also provided by pupils which naturally called for constant supervision on the part of the staff and overseers.

Three new pupils were admitted by competitive examination and they, together with four junior pupils, were, in addition to practical work, given instruction in applied agricultural science.

All pupils attended lectures or demonstrations on Saturdays and also on other occasions as circumstances permitted. The subjects to which fullest attention was given were the cultivation and handling of citrus fruits, cocoa and bananas. Lectures were given in elementary agricultural economics with the object of illustrating the usefulness of keeping cost accounts.

Grammar School Boys.—In collaboration with the Headmaster of the Grammar School, a course of instruction in practical agriculture was arranged and commenced to supplement the theoretical work of boys of the upper forms. They attended at the department fortnightly during the school term and were instructed in practical operations and also shown the effects of various cultural methods in the department's trial grounds and at the Government Fruit Farm, Copt Hall.

The training of pupils is largely in the hands of the Assistant Agricultural Officer stationed at headquarters.

Southern and Eastern Districts.—Agricultural instruction in these districts was chiefly in the hands of the Travelling Agricultural Instructor. He followed up plants supplied to planters and peasants, and in the case of the latter, assisted in the selection and preparation of land for various crops, the planting out of young trees obtained from the department's nurseries, and in their aftercare. The extension of plantings of permanent crops was encouraged and advice given on the preparation of products for export.

Only fair progress is to be recorded in the development of the plots of grapefruit which were planted by selected peasants in 1933 and 1934. Two additional plots were planted in 1935. There is, however, not the same keen interest shown by the peasants in this crop now that banana growing has become general.

Much of the Travelling Agricultural Instructor's time was spent on work in connection with the Banana industry, particularly in advising peasants on the selection of suitable healthy planting material, control measures to be taken against the spread of Panama disease and the careful handling of fruit.

Northern District.—The Assistant Agricultural Officer stationed in this district was transferred to headquarters at the end of February. Subsequently, visits were paid by officers from headquarters. Arrangements were made for supplies of citrus plants to be available from the Marigot nursery until November.

Advisory Work.—The senior officers of the department paid many visits to estates and maintained close contact with members of the planting community. Agricultural problems were discussed on the spot and advice was given on cultural matters affecting any particular estate. Planters were also accorded interviews at headquarters and in some cases took the opportunity of seeing the demonstration work of the department.

Estates in receipt of Government loans were inspected and reports submitted. The Agricultural Superintendent is a member of the Loans Investigation Committee which advises on matters of policy in connection with loans.

During the year the first meeting of the West Indian Fruit and Vegetable Council (Eastern Group) was held in St. Lucia at which Dominica was represented by the Agricultural Superintendent, Mr. F. G. Harcourt and Mr. I. N. Shillingford.

A report on this meeting was published and circulated to interested parties in the island.

The thanks of the department are extended to planters who generously accorded officers their usual kind hospitality and in many instances supplemented existing facilities for travelling.

6. IMPERIAL COLLEGE OF TROPICAL AGRICULTURE.

The department continued to work in close collaboration with the Imperial College of Tropical Agriculture, Trinidad, and the Commissioner of Agriculture and members of his staff paid periodical visits for the purpose of discussing and advising on local agricultural problems. The usual assistance in the determination of pests or diseases and advice in other matters was also given by officers of the College as occasion demanded.

7. CORRESPONDENCE.

Five hundred and one letters were despatched and three hundred and forty-seven Minute Papers dealt with, in addition to numerous Confidential Minute Papers. Various pamphlets and copies of reports were distributed to planters interested.

8. LABORATORY WORK.

A small laboratory is maintained for the purpose of the simple examination and analysis of commercial products, and during the year the chief tests made were as follows:—

Raw Lime Juice	11
Concentrated Lime Juice	8
Bay Oil	98
Lime Oil	3
Milk	55

9. STAFF NOTES.

Mr. F. G. HARCOURT, M. B. E., Curator and Agricultural Superintendent, officially represented Dominica at a meeting of the West Indian Fruit and Vegetable Council (Eastern Group) held in St. Lucia in April, 1935.

Mr. H. B. PIDDUCK, Assistant Agricultural Officer, was transferred to headquarters from the Northern District on 25th February.

Mr. W. E. BASSETT, Assistant Agricultural Officer, was granted vacation leave from 8th March to 9th September. On his return he assumed the duties of Manager, Government Fruit Farm.

Mr. S. A. SCHOUTEN, Manager, Government Fruit Farm, was transferred to the Agricultural Department, Montserrat, on 10th September.

Mr. E. E. TAYLOR, Officer-in-Charge, Government Marketing Depôt, proceeded to Barbados on sick leave on 1st July and returned on 9th September, during which time Mr. SCHOUTEN deputised in addition to performing his regular duties.

Mr. A. C. WINSTON, Travelling Agricultural Instructor, was transferred to the Treasury Department at the end of the year.

Junior members of the staff all took local vacation leave during the year.

SECTION III.

FINANCIAL STATEMENT.

Expenditure and Revenue.—Statements of expenditure and revenue with regard to special services are given in the appropriate sections of the report. Expenditure, other than on special services, and the general revenue of the department were as follows:—

Expenditure.

	£	s.	d.
Personal Emoluments	1,658.	19.	4
Contingencies	9.	13.	4
Maintenance of Botanic Gardens	317.	8.	8
Cultivation of Demonstration Plots, &c.	241.	17.	6
Purchase of Special Manures	54.	18.	1
Experiment Station	299.	7.	0
Upkeep of Morne Bruce Lands & Military Cemetery	20.	0.	0
Chemicals & Apparatus	7.	15.	5
Upkeep of Horses & Mules	29.	16.	8
Travelling Allowance to Assistant Agricultural Officer, Northern District	24.	13.	6
Horse Allowance to Inspector Protected Produce Books	21.	0.	0
Purchase of Mule	18.	3.	5
Agricultural Pupils	201.	7.	4
	£2,905.	0.	3

Receipts.

Limes	£245.	1.	7½
Cocoa	17.	14.	9
Fruit	70.	18.	3
Onion Seed	12.	16.	8½
Laboratory Receipts	8.	17.	3
Miscellaneous	22.	16.	7½
	£378.	5	2½

SECTION IV.

SUMMARY OF LEGISLATIVE CHANGES.

The following legislative changes affecting agricultural industries were made during the year under review :—

The Plants Protection Ordinance No. 5 of 1935 was passed to amend Sections 2 and 11 of the principal Ordinance (No. 2 of 1927) in respect of notifiable pests and diseases.

A Proclamation dated 10th August, 1935, made Panama Disease of bananas a notifiable disease.

Statutory Rules and Orders No. 17 of 1935, Banana Rules, were made under Section 22 of the Banana Ordinance, No. 2 of 1934. These rules define the Dominica Banana Association's powers in connection with the banana industry.

An Ordinance (No. 6 of 1935) was passed to provide for the establishment of an Agricultural Advisory Committee, consisting of the Administrator as President, the Agricultural Superintendent, ex officio member, and not less than five other persons interested in agriculture. The Assistant Agricultural Officer, headquarters, was appointed secretary to this Committee.

APPENDIX I.

Report of the Manager, Government Fruit Farm, Copt Hall.

Mr. S. A. Schouten, Dip. Agric. (I. C. T. A.) was Manager of the Government Fruit Farm, Copt Hall, from the beginning of the year to the 9th September, when he was transferred to the Agricultural Department, Montserrat. Mr. W. E. Bassett was Manager from that date until the end of the year.

2. The chief work done in 1935 consisted of routine cultural operations, and in general followed closely the lines described in previous reports. In some parts of the estate the citrus trees, especially in the earliest grapefruit plantings, made satisfactory progress, but on the whole growth and development were slow. This slow development of the trees may be due to more than one factor, but there is no doubt that the wind is having a retarding effect.

3. **Windbreaks.**—In view of the deleterious effects of wind on the development of the farm, the establishment of a complete system of permanent windbreaks continues to receive attention Much has been done in this direction, and further windbelts of Pois Doux (*Inga laurina*), one of the most suitable species for the purpose, were planted in 1935. Although windbelts planted in 1932 and previously are already having some useful effect, it will be several years before the permanent windbreaks as a whole provide sufficient shelter for the Farm, and it has been necessary to cultivate fast-growing plants such as *Tephrosia candida*, *Cajanus Cajan* and *Gliricidia maculata* as temporary windbreaks throughout the greater part of the estate.

4. **Planting.**—The total planted area, recorded as 96 acres in last year's report, was slightly increased by small extensions to various plots. Six hundred young Marsh grapefruit trees were planted as fillers between the older trees in the Grapefruit Sections of seven Estate Development Plots. The distance from the young trees to the older ones is about 19 feet, and having regard to the rate of growth of Marsh grapefruit trees at the Farm, this is considered to be sufficient for many years.

5. **Manuring.**—Fish manure and sulphate of ammonia were applied to all plots in two dressings, one being given in May and one in November. A mulch of lemon grass or similar material was maintained around the trees for the greater part of the year.

6. **Agricultural Instruction.**—One agricultural pupil was employed throughout the year, principally on keeping cost-accounts and other records. Most of the pupils undergoing training in the department spent periods, varying in duration from two weeks to three months, at the Farm to assist with such work as pruning, spraying and cost-accounting, and to enable them to gain experience of the methods of general cultivation practised on the Farm.

7. **Repairs to Buildings, etc.**—The disused machinery in the building used as the farm office was sold and removed.

The roofs of the storeroom and the driver's house and the whole of the foreman's house were painted.

Several minor repairs and improvements to buildings were carried out and a Stevenson Screen was made and set up with a view to the recording of relative humidity and air temperatures in 1935.

8. **Expenditure.**—Expenditure during the year was as follows:—

Personal Emoluments	£384.	10.	3
Annuity to previous owner	75.	0.	0
Tools	10.	10.	11
Nursery and Demonstration Plots ..	264.	19.	8
Estate Development	404.	8.	2
	£1,139.	9.	0

9. **Revenue.**—Revenue, derived chiefly from the sale of crushing and boiling house machinery, and amounting to £50. 1. 0 was received.

W. E. BASSETT,
Assistant Agricultural Officer,
Manager, Government Fruit Farm.

APPENDIX II.

Report of the Officer-in-Charge, Government Marketing Depot.

The operations of the Government Marketing Depôt during the year ended 31st December, 1935, being essentially of a business nature, are best illustrated by the following tabular statement of the quantities and values of the various produce packed and marketed. The quantities shown do not include green limes exported to the United States of America or most of the exports to neighbouring West Indian Islands which are not packed by the Depôt.

Produce.	*Size of Crate in cub.ft.*	*Packed, but not marketed by the Depot.*		*Packed & marketed by the Depot.*		*Total packed by the Depot.*	
		Quantity.	*Estimated f.o.b. value* £ s. d.	*Quantity.*	*Estimated f.o.b. value* £ s. d.	*Quantity.*	*Estimated f.o.b. value* £ s. d.
Oranges ..	2	239	126 9 0	6525	3452 16 0	6764	3579 5 0
Grapefruit ..	2	2790	1336 18 0	1934	926 14 0	4724	2263 12 0
Green Limes ..	2	237	172 18 0	267	149 11 0	504	322 9 0
Lemons ..	2	—	—	178	96 0 0	178	96 0 0
Avocado Pears ..	¾	700	140 0 0	574	114 16 0	1274	254 16 0
Mangoes ..	2	263	127 16 0	212	82 19 0	475	210 15 0
Total ..		4229	1904 1 0	9690	4822 16 0	13919	6726 17 0

The estimated total f.o.b. value of produce shipped during the year shows an increase of £1,683 over last year, and the total number of crates exported amounted to 13,919 as compared with 12,636 in 1934, an increase of 1,283.

F. O B. values are estimated by approximately averaging from account sales received up to the 31st December, and give the approximate weighted average f.o.b. values for each crop packed by the Depôt for the year, and when compared with corresponding total Packing House cost gives the respective nett returns to the growers for the actual produce.

These were as follows :—

Produce.	*Size of crate in cub. feet.*	*Approximate average f.o.b. returns from account sales received.*	*Average Packing House Cost.*	*Average nett return to the Grower.*
Oranges	2	10/7	3/2	7/5
Grapefruit	2	9/7	3/2	6/5
Green Limes	2	12/9	3/2	9/7
Lemons	2	10/9	3/2	7/7
Avocado Pears	¾	4/-	1/3	2 9
Mangoes	2	6/6	2/10	3/8

Oranges.—Depôt shipments for the year amounted to 6,764 crates as compared with 5,182 in 1934, an increase of 1,582.

In January, 134 crates, which represented the end of the 1934–35 crop, were shipped to Bermuda, and netted the producer 5/10 per crate. Shipments of the 1935–1936 season's fruit commenced early in August, and, to the end of December, the Depôt exported 6,630 crates, 81% of which was shipped to Canada and the remaining 19% to Bermuda. No difficulty was experienced this year in obtaining sufficient and suitable cold storage accommodation for fruit on the Canadian National Steamships, and this has in some measure helped to increase the exports. In November, Montreal agents purchased 1,600 crates in two shipments on a firm f.o.b. basis and the trade were extremely pleased with the out-turn of this fruit. Two hundred and eighty-one crates of seedling oranges from small suppliers were successfully marketed in St. John, New Brunswick. In consequence of their superior flavour and juiciness, Dominica's Navel Oranges have been in great demand throughout the season, and orders from agents were constantly in excess of the quantities available. Prices have been uniform this year and statistics reveal an increase over last season of 1/- per crate nett to the grower. A reduction of 5d. per crate on cold storage rates to Canada has contributed to this increase.

Grapefruit.—During the first three months of the year 375 crates were exported by the Depôt to the Maritime Provinces. Prices obtained were very low, suppliers receiving only 1/6 per crate nett. An improvement in this market in April enabled the growers to ship the remaining 216 crates of the 1934–35 season's fruit at a fairly remunerative figure. Early in August the first shipment of the 1935–36 crop was made and for the last five months of the year exports totalled 4,133 crates. No shipments were sent to the United Kingdom, and Bermuda only took 31 crates during the year. Comparison with last year's figures shows an increase of 1,843 crates. This increase is entirely due to the fact that the price level, inconsistent with the past two years remained at a figure which warranted shipments up to the end of December. It will be seen that the average nett price per crate to the producer was 6/5, that is, 1/4 more than that of last year. Towards the end of December, the market showed a strong preference for seedless fruit, and while agents were cabling for supplies of the "Marsh" seedless variety, there was no demand for the seeded "Triumph" variety, and reports from abroad tend to show that growers will find it more and more difficult to dispose of their seeded fruit in future.

Green Limes.—Exports to the United States of America amounted to 3,782 barrels, that is, 216 more than in 1934. These were packed in private packing houses licensed for the purpose and inspected by Government Fruit Inspectors. Medium and large size limes were again scarce this year, hence the demand in Montreal was not fully supplied. During the summer, the equivalent of 280 citrus crates were, however, shipped there in crates of ¾ cu. ft. capacity, and on an f.o.b. basis. Bermuda disposed of 132 citrus crates, 35 of which were shipped to the Depôt's agents and returned an average of 9/6 per crate to the producers. Shipments amounting to 92 citrus crates were directed to the United Kingdom.

Lemons.—A favourable increase is recorded in the export figures for lemons, 178 citrus crates this year as against 81 during 1934. Growers netted approximately 7/6 per crate.

Avocado Pears.—In the past the Depôt has always marketed approximately 20% to 30% of the pears packed in the Depôt, the remainder being made up of shipments from several private shippers to their respective agents in Bermuda. During the year under review, the Depôt's quantities shipped are in line with previous years, although prices have been somewhat lower. Suppliers have received an average nett return of 2/9 per crate of about 18 fruit, which is 7d. a crate less than last year. It will therefore be seen that the decline of 40% in shipments from the Depôt is due to the falling off of shipments by private shippers.

Mangoes.—There was a falling off in the number of crates of this fruit packed by the Depôt, but the quantity marketed by the Depôt was approximately the same as in the previous year. The 212 crates of mangoes marketed by the Depôt included 36 Julies packed in lugs and 176 ordinary mangoes packed in citrus size crates. Returns were slightly lower than for the previous season.

Expenditure.—Expenditure on the work of the Government Marketing Depôt during the calendar year 1935 was as follows:—

Personal Emoluments	£624.	15.	4
Wages of Staff	35.	0.	0
Contingencies & Equipment	14.	16.	5
Printing & Stationery	9.	13.	2
	£684.	4.	11

Compared with last year a saving of £5. 4. 5 was effected

Revenue was as follows:—Inspection Fees and Packing House Receipts £498. 12. 10—an increase of £37. 0. 9 when compared with revenue for 1934.

Cold Storage Fees.—The Cold Storage and Ice Making Plant is operated by the Public Works Department and fees collected for the pre-cooling of fruit for export amounted to £98. 16. 2.

Office Details.—In the interest of economy, the Clerical Assistant who previously was employed all through the busy export season, was only at work half the time. Successful efforts were made to maintain the efficient working of the office, and returns due to growers were paid and entries relating to each consignment closed within a week of the receipt of account sales from overseas agents.

General.—Reports showing the local prices for produce were compiled by the Officer-in-Charge, Government Marketing Depôt, and circulated weekly for posting at country police stations and for publication in the local press. The Officer-in-Charge, Government Marketing Depôt, was Vanilla Examiner throughout the buying season. Secretarial duties in connection with the "Fruit Trade Committee," the "Statutory Committee on Export Values" and the "Permanent Exhibition Committee" were carried out as usual.

During the less busy time of the year the Officer-in-Charge, Government Marketing Depôt, assisted with general office work at headquarters of the Department, and gave to the Agricultural Pupils a course of 9 lectures on Banana Cultivation, and three lectures on Picking and Handling Citrus Fruit for export.

EMIL TAYLOR,
Officer-in-Charge,
Government Marketing Depôt.

STATEMENT OF THE GOVERNMENT MARKETING DEPÔT TRADING ADVANCE ACCOUNT FOR THE YEAR ENDED 31ST MARCH, 1936.

Outstanding expenses at 1.4.35	£	7.	9.	8	Gross receipts from Sales abroad	£6,183.	10. 8
Cost of packing materials ..		1,101.	18.	6	Receipts locally for materials, packing expenses etc. ..	518.	16. 4
Packing charges		425.	10.	4	Outstanding expenses at 31. 3. 36	87.	17. 11
Shipping charges . ..		491.	16.	6			
Sea and Rail freights and marketing		1,577.	11.	4			
Supervision		157.	15.	3			
Payments to growers		3,028.	3.	4			
	£6,790.	4.	11			£6,790.	4. 11

G. A. WINSTON,
Clerk,
Government Marketing Depôt.

METEOROLOGICAL SUMMARY, BOTANIC GARDENS, DOMINICA, 1935.

Year. 1935.	PRESSURE. *Corrected & reduced to 32° F., M.S.L.*				TEMPERATURE.								RELATIVE HUMIDITY.		RAIN-FALL
					ABSOLUTE.		MEAN VALUES.								
	Highest.	Lowest.	MEANS.		MAX.	MIN.	MAX.	MIN.	DRY BULB.		WET BULB.		MEANS.		AMOUNT.
	—	—	9 a.m.	3 p.m.	—	—	—	—	9 a.m.	3 p.m.	9 a.m	3 p.m.	9 a.m.	3 p.m.	
	IN.	IN.	IN.	IN.	°F	°F	°F	°F	°F	°F	°F	°F	%	%	IN.
January ...	30.06	29.83	29.99	29.92	86	63	83	68	77	81	72	73	75	62	2.37
February ...	30.08	29.92	30.03	29.95	87	66	85	69	77	83	72	74	73	60	1.59
March ...	30.17	29.93	30.05	29.96	87	66	83	68	76	82	71	73	77	59	6.90
April ...	30.19	29.86	29.99	29.92	91	67	87	69	80	85	74	76	69	62	1.45
May ...	30.04	29.85	29.98	29.91	90	69	86	72	82	85	76	77	71	65	4.27
June ...	30.03	29.91	29.99	29.94	89	71	88	80	83	85	76	77	70	63	5.04
July ...	30.05	29.87	29.99	29.94	90	71	88	73	82	86	77	78	75	67	13.47
August ...	30.08	29.82	29.98	29.91	90	68	87	72	82	86	78	79	79	71	8.87
September ...	30.01	29.84	29.95	29.88	89	65	88	67	83	86	78	79	77	68	12.93
October ...	30.05	29.80	29.94	29.85	89	65	88	67	83	85	78	80	76	77	5.43
November ...	29 97	29.80	29.91	29.84	90	64	87	67	82	86	78	80	80	75	3.39
December ...	30.08	29.84	30.01	29.91	88	62	85	65	79	83	74	76	78	72	6.24
YEAR ...	30.07	29 85	29.98	29.91	89	66	86	70	80	84	75	77	75	67	71.95

Highest Barometer Reading (corrected):	30.19 in.	on 2nd April.
Lowest ,, ,, ,,	29.80 ,,	,, 7th & 17th October, & 12th November.
Highest maximum temperature:	91°F	,, 26th April.
Lowest minimum ,,	62°F	,, 31st December.
Greatest rainfall in 24 hours:	3.36 in	,, 23rd September.

RAINFALL AT THE BOTANIC GARDENS, DOMINICA, 1916–1935.

	1916.	1917.	1918.	1919.	1920.	1921.	1922.	1923.	1924.	1925.	1926.	1927.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	Monthly Mean Rainfall.
January ...	10·79	5·00	6·02	2·42	7·54	6·82	6·50	3·82	6·25	7·88	3·68	5·50	6·60	5·18	10·65	1·47	5·47	7·30	4·81	2·37	5·80
February ..	1·90	4·10	8·73	1·52	4·76	1·02	4·30	2·30	1·90	1·95	2·46	4·50	4·25	3·13	2·07	1 05	1·57	2·13	1·70	1·59	2·84
March ...	4.52	6·74	3·32	·69	3·80	4·46	2·80	3·46	·66	3·50	·96	5·37	6·30	7·36	3·89	·59	1·56	2·37	3·36	6·90	3·63
April ...	1.22	·47	1·86	2·36	·22	3·06	2·26	3·77	1·46	·40	2·77	4·67	4·16	1·27	5·01	·51	2·33	2·03	2·91	1·45	2·20
May ...	2·05	2·94	5·90	4·60	2·38	1·54	2·64	·13	3·18	2·76	2·44	6·69	2·25	2·80	2·21	1·70	5·07	2·26	3·82	4·27	3·08
June ...	4·82	15·34	6·04	3·88	3·48	1·96	7·14	4·18	4·42	5·80	5·76	15·03	6·68	10·87	7·32	9·98	10·72	7·05	2·59	5·04	6·90
July ...	8·23	13·70	11·28	12·64	12·08	11·18	6·08	8·20	13·64	6·23	10·14	9·61	6·58	13·13	7·90	18 45	8·05	12·30	9·54	13·47	10·62
August ...	16·58	8·53	8·46	9·64	8·76	9·30	9·26	11·44	11·28	13·88	10·10	4·65	12·80	12·55	6·76	17·44	7·23	7·94	7·61	8·87	10·15
September.	6·20	15·02	4·14	7·06	8·60	6·28	10·68	4·28	4·88	9·12	4·12	6·20	8·10	5·63	14·66	13·51	6·13	11.51	4·08	12·93	8·15
October ...	10·06	2·46	6·67	7·50	12·60	9·41	2·68	9·84	10·98	12·55	5·86	8·84	4·35	12·19	3·15	9·71	6·72	9·26	3·89	5·43	7·70
November.	14·28	1·92	3·36	9·02	4·62	2·44	3·00	1·06	6·86	9·60	7·54	8·70	7·93	14·39	5 51	11·90	13·83	11.04	5·58	3·39	7·29
December .	3·77	4·58	5·86	6·70	5·62	4·22	6·90	1·92	13·65	2·02	3·75	1·37	5·38	8·48	3·66	7·56	5·21	7·03	9·46	6·24	5·66
Total ...	83·42	80·80	71·46	68·03	74·46	61·72	64·24	54·40	79·16	75·69	59·58	81·13	75·38	96·98	72·79	93·87	73·89	82·22	59·35	71·95	– –

Average year = 74·26 inches.

RAINFALL RETURNS, DOMINICA, 1935.

Stations.		Jan.	Feb.	March.	April.	May.	June.	July.	August.	Sept.	October.	Nov.	Dec.	Totals.
1. Batalie	L ...	1.61	.93	2.45	.00	2.51	2.59	6.95	7.95	6.92	1.51	2.78	2.46	38.66
2. Botanic Gardens	L ...	2.37	1.59	6.90	1.45	4.27	5.04	13.47	8.87	12.93	5.43	3.39	6.24	71.95
3. Blenheim	LAS.	5.82	3.60	3.46	3.99	9.10	5.97	14 26	10.51	15.65	8.68	12.43	8.35	101.82
4. Canefield	L ...	2.95	.86	5.61	1.74	3.60	4.33	13.66	10.49	13.27	5 54	3.26	4.21	69.52
5. Clark Hall	L ...	4.33	.93	4.54	1.97	6.85	7.94	16.57	12.01	17.54	8.79	4.03	7.94	93.44
6. Copt Hall	L ...	4.87	5.66	12.22	3.53	9.12	9.55	22.79	15.69	19.74	8.93	7.90	12.20	132.20
7. Fond Hunt	I ...	15.30	7.00	13.50	12.25	11.75	12.25	14.00	11.50	21.20	18.75	15.20	9.19	161.89
8. Governor	W ...	6.79	5.54	5.11	6.46	11.13	9.01	16.87	11.85	21.46	18.99	12.02	8.02	133.25
9. Hampstead	LAS.	5.69	3.14	3.39	4.98	7.14	4.63	9.40	8.66	11.73	11.81	5.56	7.18	83.31
10. Morne Bruce	L ...	2.61	1.91	7.54	1.71	4.69	5.65	14 73	9.31	13.21	5.84	4.06	7.47	78.73
11. Moore Park	I. ...	3.40	3.75	3.67	1.34	7.80	4.73	11.74	6.56	11.45	10.05	9.66	7.63	81.78
12. Picard	L ...	4.31	4.66	3.64	2.35	7.11	5.31	13.51	14.03	13.82	4.63	5.88	8.35	87.60
13. Pte. Mulâtre	W ...	3.76	5.37	5.23	9.43	11.49	4.78	8.74	15.98	10.12	27.11	11.80	10.21	124.02
14. Rosalie	W ...	14.45	7.52	5.07	8.98	7.79	5.64	11.10	12.95	14.52	36.51	10.34	10.31	145.18
15. Ridgefield	L ...	5.38	4.67	10.86	4.09	9.85	9.58	20.16	12.50	21.20	7.29	8.77	11.96	126.31
16. Shawford	I ...	12.92	7.81	23.32	9.49	25.70	16.90	29.27	42.10	31.22	18.15	17.51	23.84	258.23
17. Sherwood	I ...	9.00	7.75	5.75	5.65	14.62	12.20	31.35	21.55	24.55	10.70	12.35	18.60	174.07
18. Stowe	W ...	4.85	4.52	6.54	5.56	10.91	5.95	10.17	10.69	11.87	18.28	11.69	9.55	110.58

Mean Rainfall 18 Stations ... ... 115.14 inches.
,, ,, 8 Leeward Stations... ... 87.30 ,,
,, ,, 4 Windward ,, ... 128.26 ,,
,, ,, 4 Inland ,, ... 168.99 ,,
,, ,, 2 Lasoye ,, ... 92.56 ,,

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